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STAFFING INDIRECT EFFORTS AT CENTRAL PROCUREMENTS
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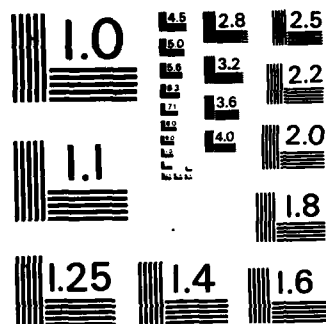
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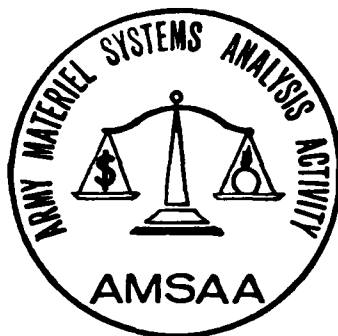
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ARMY PROCUREMENT RESEARCH OFFICE

APRO 83-08

FINAL

STAFFING INDIRECT EFFORTS AT
CENTRAL PROCUREMENT OFFICES - PAMUPS

DECEMBER 1983

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U. S. ARMY MATERIEL SYSTEMS ANALYSIS ACTIVITY
ARMY PROCUREMENT RESEARCH OFFICE
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EXECUTIVE SUMMARY

A. BACKGROUND. The Procurement Automated Manpower Utilization and Projection System (PAMUPS) is designed to automate the application of work measurement principles within the central procurement activities of DARCOM's major subordinate commands (MSC's). Standards have been developed to measure the direct effort of the procurement function in PAMUPS. However, no attempt has been made to establish standards or assess the indirect effort required to accomplish the mission of the central procurement offices. If no way is found to document the hours earned by personnel in the support areas, PAMUPS work measurement will be incomplete and hence misleading.

B. OBJECTIVES.

1. Identify tasks/functions performed in the Central Procurement Offices of the MSC's which can be classified as indirect effort.

2. Describe methodology which can be employed in PAMUPS to evaluate the indirect work effort, to include assisting DARCOM and ALMSA in preparation of PAMUPS system change.

C. STUDY APPROACH. A visit to each MSC involved in PAMUPS was made to examine their Table of Distribution and Allowances (TDA's) and to review their mission and function statements. These visits contributed to the identification of authorized spaces providing indirect support to the central procurement function. Organization charts of each Procurement and Production Directorate were developed to illustrate which divisions were solely involved with the direct work effort, with the overhead functions of support, or with both. An examination of PAMUPS Summary Reports resulted in a methodology to identify the indirect earned hours expended by the support groups.

D. SUMMARY AND RECOMMENDATIONS. This study provides a means by which the indirect work effort can be measured and included in PAMUPS. The system change (SCR NO. XBB0C22900E) to PAMUPS enables the indirect hours to be accounted for by listing each indirect available hour as a support earned hour. This satisficing solution is readily manifested into the present system and can be modified with relative ease in the future as required. The organizational charts contained within this report identify the allocation of direct and indirect labor functions at the P&P Directorates of the MSC's. It is recommended that the DARCOM Management Engineering Activity (DARMEA) use this report in cooperation with the Central Procurement Offices at the MSC's to develop work standards for indirect functions. Their coverage should include activities with assigned central procurement Army Management Structure Code spaces both within and outside the central procurement office. The charts also show the allocation of central procurement spaces to organizational elements outside the Directorate for P&P or its equivalent vary significantly between commands. It is important that management ensure proper allocation of resources to the 721113.1&2 accounts and so it is recommended that HQ DARCOM (DPP) should maintain a PAMUPS coordinator to monitor the allocation of these spaces. In addition, DARCOM and the MSC's should continue to pursue an automated means within PAMUPS to classify the direct or indirect status of individual spaces.

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CHAPTER I

INTRODUCTION

A. BACKGROUND.

The Procurement Automated Manpower Utilization and Projection System (PAMUPS) is designed to automate the application of work measurement principles within the central procurement activities of DARCOM's major subordinate commands (MSC's). PAMUPS combines these principles with procurement workload projections to justify manpower needs for support of budget estimates under the central procurement program.

Standards were developed to measure the direct effort of the procurement functions in PAMUPS by a team of experience procurement experts well acquainted with the intricacies of the procurement function. Direct effort is defined as those tasks performed by central procurement personnel which directly contribute to the formation and administration of specific procurement instruments, such as, invitations for bid (IFB), contracts and purchase orders to mention a few. However, no attempt was made to establish standards or assess the indirect or overhead effort required to accomplish the mission of the central procurement offices. Indirect effort is considered as those tasks performed by central procurement personnel, essential to mission performance but not identifiable to specific procurement instruments. Examples include: procurement automated systems management, policy development, resource management; small business program administration, and general office administration.

If no way is found to document the hours earned by personnel in the overhead area of a central procurement office, PAMUPS work measurement will be misleading. That is, the only work being measured and evaluated will be the direct labor hours portion of the total procurement work force hours. A true measure of

the efficiency of a central procurement office must also include the hours of the central procurement staff performing the indirect work effort. Hence, a study to identify and measure the indirect work effort required of a Central Procurement Office essential to mission accomplishment is needed to augment direct earned hours in PAMUPS.

B. OBJECTIVES.

1. Identify tasks/functions performed in the Central Procurement Offices of the MSC's which can be classified as indirect effort.

2. Describe methodology which can be employed in PAMUPS to evaluate the indirect work effort, to include assisting DARCOM and ALMSA in preparation of PAMUPS system change.

C. STUDY APPROACH.

A visit to each MSC involved in PAMUPS was made to examine their Table of Distribution and Allowances (TDA's), and to review their mission and function statements. These visits contributed to the identification of authorized spaces providing indirect support to the central procurement function. Organization charts of each Procurement and Production Directorate were developed to illustrate which divisions were solely involved with the direct work effort and those involved with the overhead functions of support.

In many instances, organizational elements were not clearly allocated to only direct or indirect work functions. Personnel located in a division or office designated as support may be performing direct labor tasks; where as, just the opposite may be true in branches denoted as direct labor units. These crossover spaces were identified and illustrated in the organization charts. An examination of MICOM's PAMUPS reports resulted in a methodology to identify the indirect hours expended. However, no work standards were developed for the indirect areas.

A literature search failed to uncover any studies which would lead us to standards for the indirect effort involved in this study. Existing standards for indirect tasks primarily cover clerical functions. Only a minor part of the tasks performed in the indirect area by procurement personnel can be classified clerical. Hence, original standards must be developed for the indirect labor areas of the MSC central procurement offices.

It was decided in a meeting with personnel from DARCOM P&P and the DARCOM Management Engineering Activity (DARMEA) that the mission of developing the actual work measurement standards for indirect functions was properly DARMEA's. Hence, DARMEA will use this APRO report to develop its plan for establishing standards within those MSC staffing elements classified as indirect.

CHAPTER II

MSC'S CENTRAL PROCUREMENT ORGANIZATION

A. INTRODUCTION.

This chapter deals with organizational structure and efficiency measurement at the Central Procurement Offices in DARCOM'S MSC's, specifically the Armament, Munitions and Chemical Command (AMCCOM), Communications-Electronics Command (CECOM), Missile Command (MICOM), and Tank-Automotive Command (TACOM). The Troop Support and Aviation Materiel Readiness Command (TSARCOM) was excluded due to its pending reorganization at the time of the study. Organization charts (Figures 1 through 4) are used to illustrate the allocation of direct and indirect labor. In addition, these charts show the diversity of the composition of the MSC's in their approaches to accomplishing the procurement mission. An interim method to account for support manpower utilization until indirect standards are developed for PAMUPS is presented as part of the discussion on efficiency measurement.

B. MAJOR SUBORDINATE COMMAND CENTRAL PROCUREMENT ORGANIZATION CHARTS.

1. Guidelines. The identification of direct and indirect spaces and their location in the MSC procurement organizations was done in conjunction with command representatives using the following guidelines:

- o Direct effort was defined as all personnel performing work described in the PAMUPS standards for basic instruments and complexity factors.

- o Personnel whose time is not accounted for under the standards (or individual command implementations) are indirect effort. This applies to personnel whose jobs may be logically defined as direct effort but are not included in PAMUPS. Examples of this are personnel assigned to the Director for Procurement and Production and Division Chief Offices for divisions with the primary function of procurement.

o All central procurement spaces assigned outside the central procurement offices were defined to be indirect effort. The identification of these functions and the number of personnel assigned to AMSC 721113.1 or .2 was the responsibility of the commands.

o The personnel strength for the central procurement offices was taken from the authorized strength column of the individual command TDAs. This approach was taken to avoid the fluctuating effects of using required but unauthorized or actual strength figures. Authorized DA strength is a common basis of comparison and can be audited to a specific TDA for each command.

2. Indirect Functions. The direct functions controlled by the PAMUPS work standards are the mainstream procurement operations. The execution and administration of procurement actions is the mission of each MSC. However, without the performance of a variety of indirect functions, the primary mission could not be accomplished. The indirect functions listed on Table 1 are only examples of the types of functions performed and are not meant to be an all inclusive list.

The actual element performing a function differs from command to command. As an example, TACOM has elected to assign procurement analysts to the individual divisions within the Directorate for Procurement and Production to prepare review and analysis material. This function is located in the Policy & Resource Management Division at MICOM. To determine the responsible element and type functions performed, current Mission and Function Statements for each command must be used. The titles of organizational elements are not sufficient guides to the scope of functions performed by the elements.

The number of personnel located in the support areas also differs between commands. Three support functions common at all commands are the Small Busi-

ness Office, Legal, and Management Information Systems. However, the total number of personnel assigned to these three functions vary from a low of 63 at TACOM to a high of 147 at CECOM.

TABLE 1. INDIRECT FUNCTIONS

<u>Directorate for Procurement and Production</u>	<u>Other Command Elements</u>
Resource Management	Legal Reviews
Budget Preparation & Execution	Small Business Programs
TDA Preparation & Maintenance	and disadvantaged
Fund Control	Commodity Command Standard
Administration	Systems Operations
Personnel Actions	**Preparation of Technical
Training	Data Package
Mail Distribution	**Engineering Support
Operating Supplies	**Traffic Management
Review & Analysis	
Development of Internal Policy,	
Regulations and Instructions	
Procurement Management Information	
System	
Commodity Command Standard System	
Unique Programs & Systems	
Word Processing Systems	
Production Surveillance*	

*TACOM has elected to allocate direct work standard time under applicable instruments and factors for the Production Surveillance Factor.

**Allocation to Central Procurement has been challenged by DARCOM Headquarters.

3. Direct-Indirect Staffing Charts. Each of the four command's approach to staffing for accomplishing direct and indirect functions are shown at figures 1 through 4. The charts are designed to show where organizational elements fall on a continuum from purely direct effort on the left side of the demarcation line to totally indirect effort by fact or definition on the right side. Elements with differing mixtures of both types of efforts are placed on the line to illustrate the interaction.

The number at the lower corners of each organization block follows the same logic as the chart. Values on the left represent the number of direct authorized spaces. Indirect spaces are shown on the right.

It bears repeating that these are based on the authorized TDA spaces for AMSC 721113.1 or .2. It does not include such categories as DARCOM funded interns, authorizations for hiring lags and personnel assigned to the central procurement office funded by program funds. The Program Branch, MICOM (Figure 3) is an apt illustration of the application of these rules. The Program Branch TDA reflects a requirement for one space under AMSC 721113.1¹ with zero authorized; and although, nineteen are authorized and paid under Army Procurement Appropriation funds and one by Research and Development funds, the Program Branch has a net value of zero for Central Procurement spaces to be accounted for under PAMUPS.

The complexity and size of the AMCCOM procurement and production organization compared to the other commands required the use of three charts (figures 1 through 1b). Two elements of the organization were not addressed in further detail than the top chart (figure 1). The Directorate for Production was defined by AMCCOM as essentially totally indirect, therefore breaking out these spaces below directorate level was unnecessary. The Plants Operation Directorate, which controls AMCCOM's large GOCO mission is not presently covered by PAMUPS² even though it is shown as a primarily direct effort element. Its inclusion on the chart is to provide accountability for all AMSC 721113 spaces at AMCCOM.

¹MICOM is under the Army Industrial Fund (AIF). The AIF Central Procurement AMSC Codes are 7531 and 7532.

²SCR NO: MXPPSOC332801 has been submitted to ALMSA to add coverage for GOCO operations.

Total Authorized Central Procurement Spaces - 1653

AMSC 721113.182

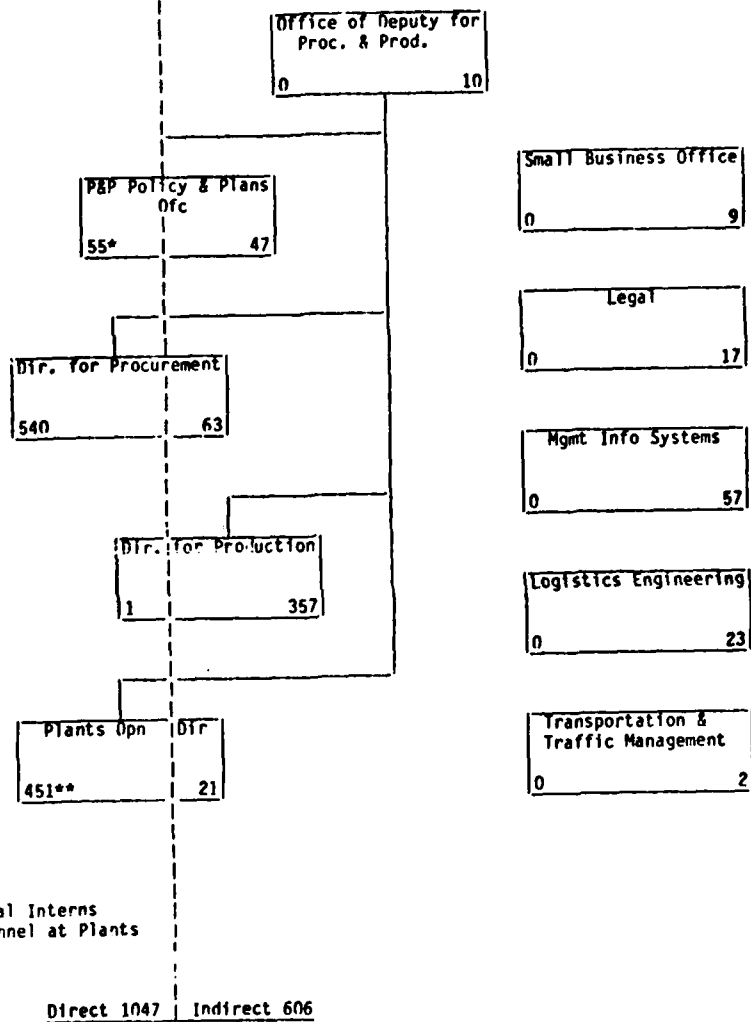


FIGURE 1. AMCCOM PROCUREMENT AND PRODUCTION ELEMENTS

Total Authorized Central Procurement Spaces - 102
AMSC 721113.1&2

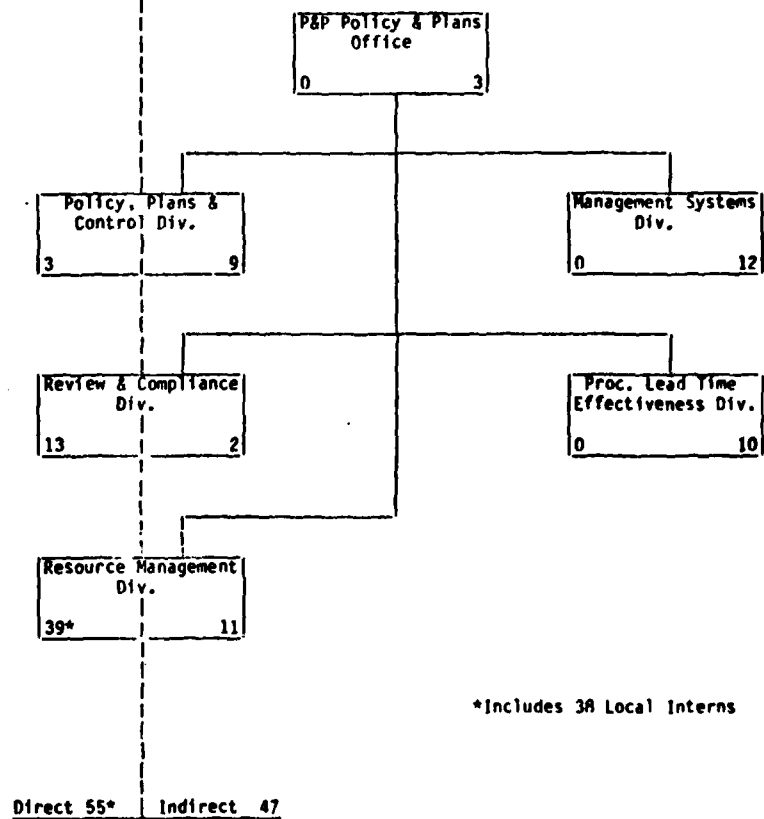


FIGURE 1.a. AMCCOM POLICY AND PLANS OFFICE

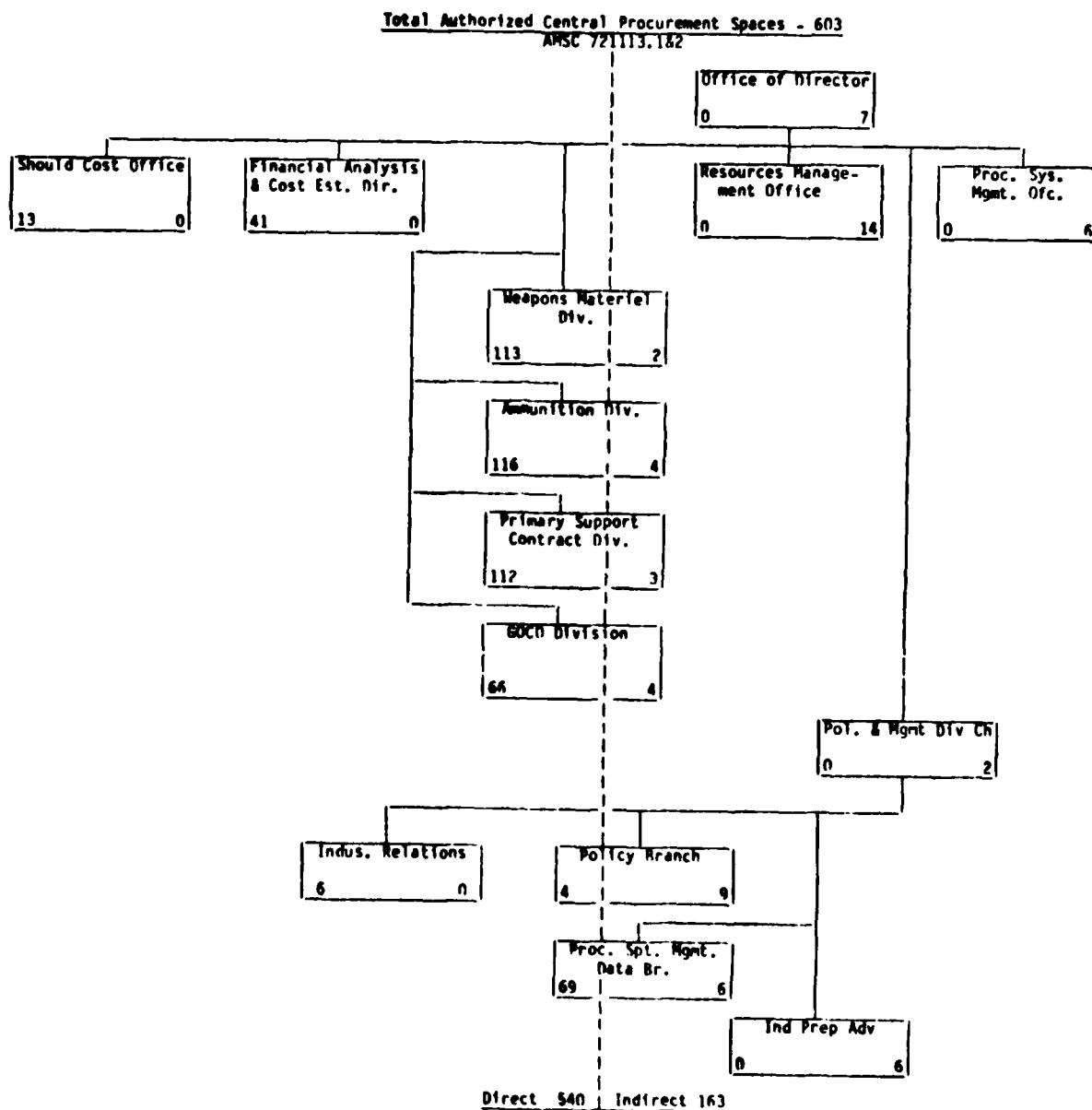


FIGURE 1.b. AMCCOM DIRECTORATE FOR PROCUREMENT

Total Authorized Central Procurement Spaces - 928
 AMSC 721113.182

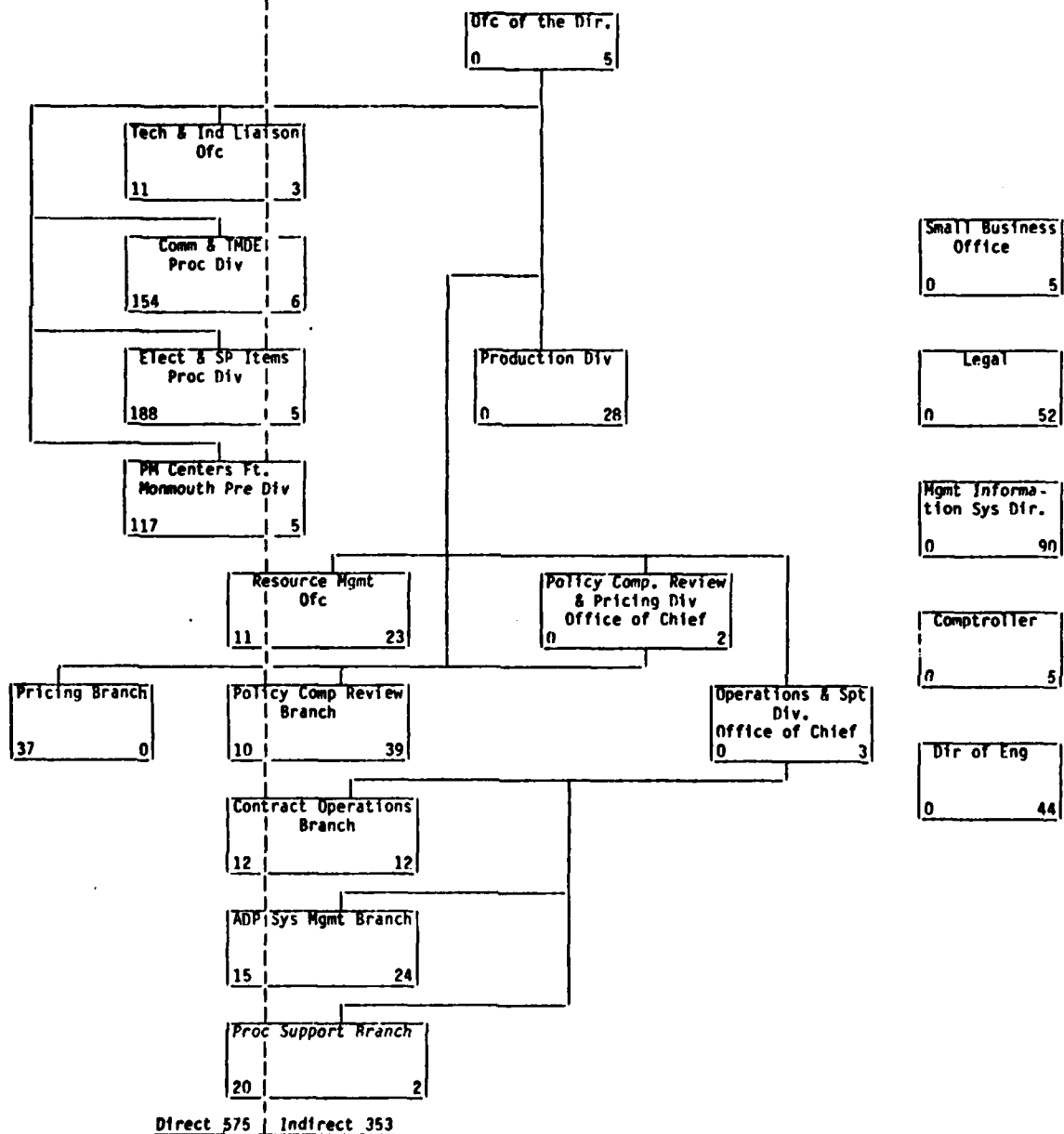
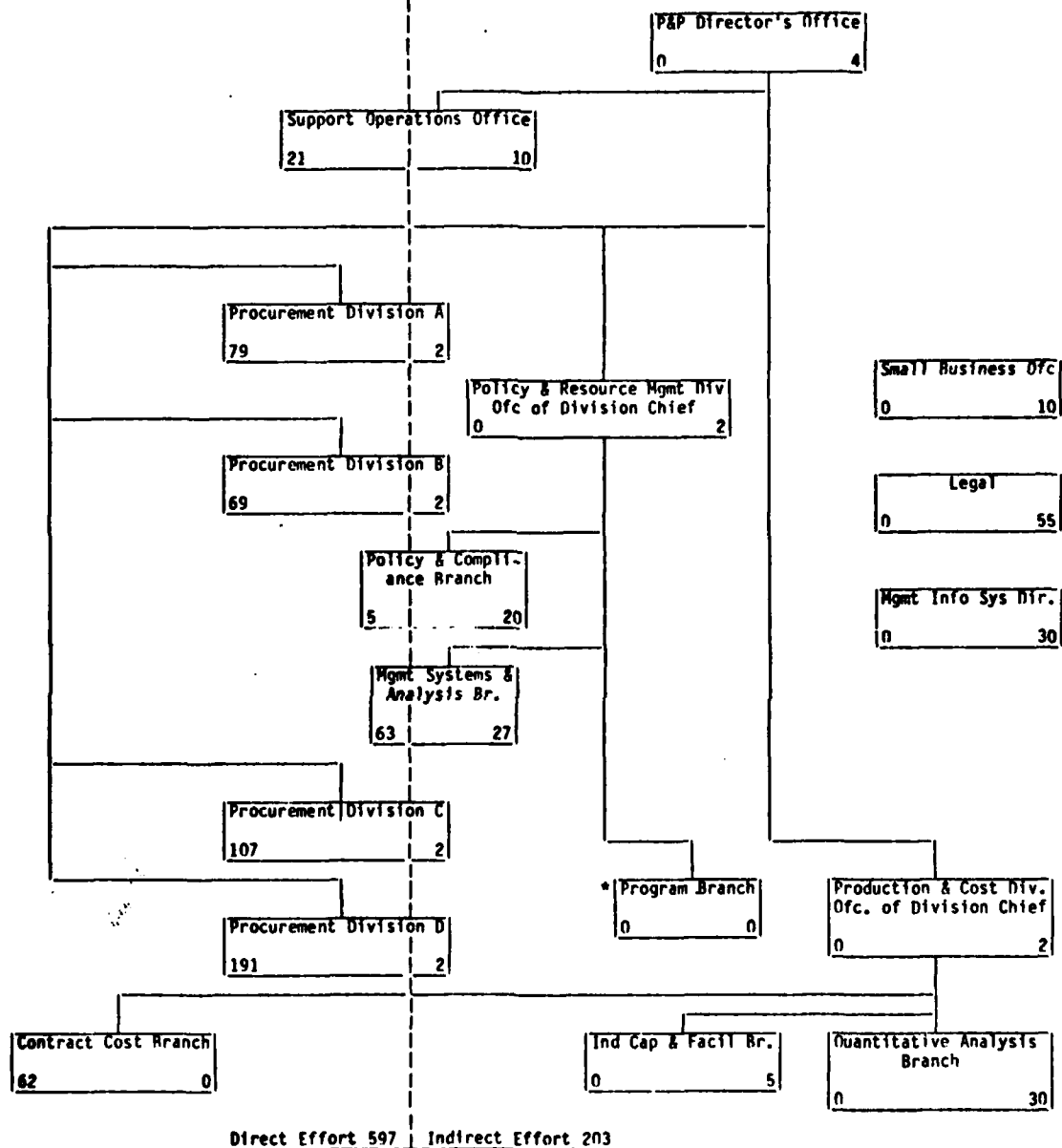


FIGURE 2. CECOM

Total Authorized Central Procurement Spaces - RMM
AMSC 721113.1&2



*No Program Branch Personnel are authorized on AMSC Code 721113.1&2

FIGURE 3. MICOM

Total Authorized Central Procurement Spaces - 837
AMSC 721113.142

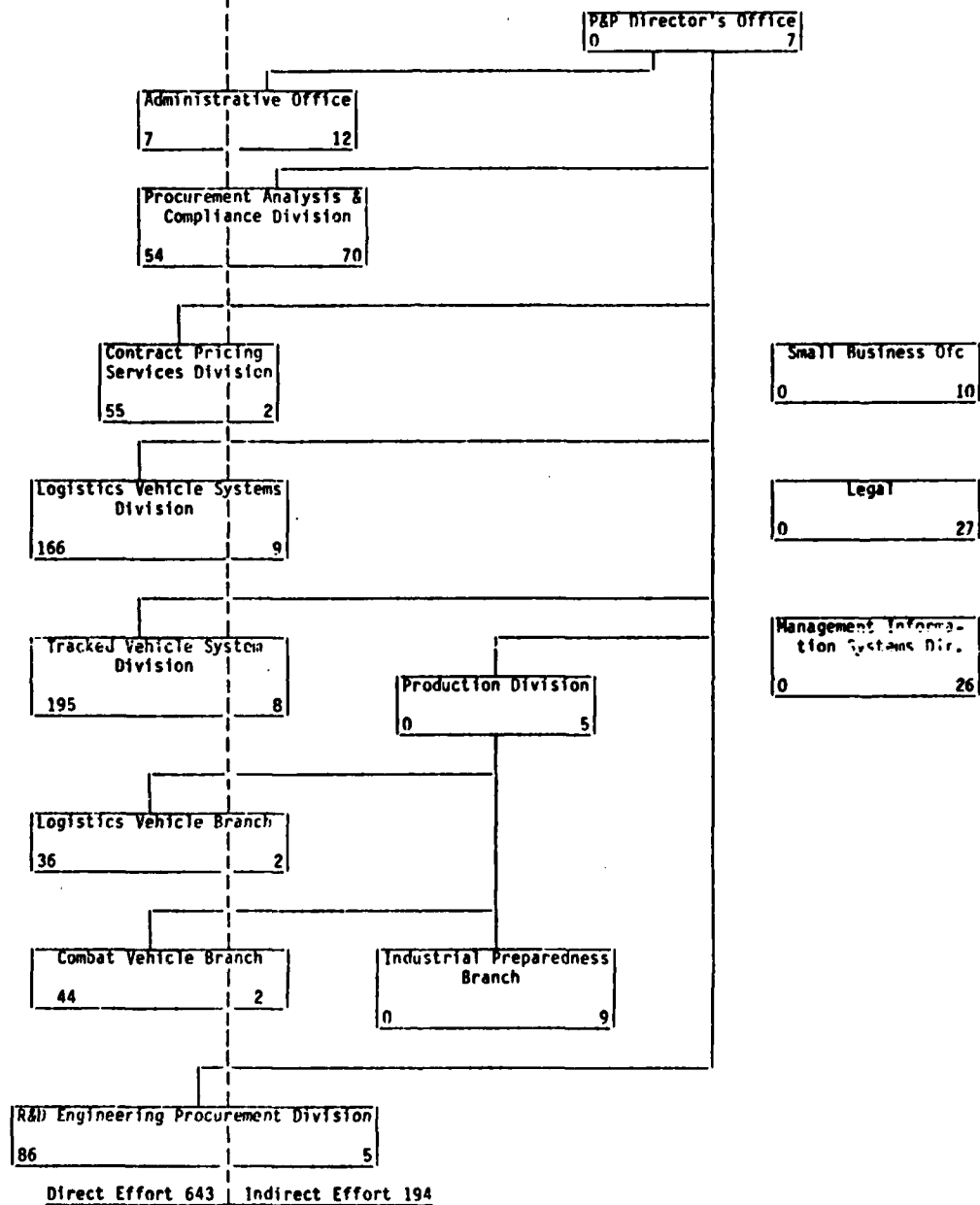


FIGURE 4. TACOM

C. PROBLEM OF MISALLOCATION.

In order to obtain a true measure of the productivity of any organization it is important to properly identify the direct and indirect labor categories. It is usually easier to correctly identify the number of personnel needed to produce a product than it is to estimate the number needed to assist or support in the production of the product.

A review of the central procurement activities of four MSC's found that indirect labor constituted 30.3 percent of the labor force (see Table 2). Other command activities not located in the Central Procurement Offices but charged to the Central Procurement Account, AMSC 721113.1&.2, add an additional 1.8 percent. The percentage of indirect staffing ranges from 23.2% at TACOM to 38.0% at CECOM. Since these resources do not directly produce procurement actions, the performance factor for AMSC 721113.1, their inclusion in the measurement of efficiency impacts negatively on the productive unit's efficiency measurement. A Procurement Directorate's productivity is currently measured using the number of procurement actions produced by each central procurement space. The inclusion of indirect spaces has a significant impact on the measurement of productivity efficiency and of the Central Procurement Activity. Therefore, it is important that each MSC properly allocate resources to the 721113.1&.2 accounts to ensure true measurement of Central Procurement's efficiency. To support the MSC's in the proper allocation of resources, DARCOM P&P can aid by monitoring the 721113.1&.2 accounts.

TABLE 2. DISTRIBUTION OF SPACES

MSC	TOTAL	DIRECT	INDIRECT	
			CENTRAL PROCUREMENT ACTIVITY	OTHER**
AMCCOM	1653	1047	581	25
CECOM	928	575	304	49
MICOM	800	597	203	
TACOM	837	643	194	
TSARCOM	*	—	—	—
TOTAL	4218	2862	1282	74

*TSARCOM was not included in the survey due its pending reorganization at the time of the study into AVSCOM and TROSCOM.

**Spaces charged to AMSC 721113.1&2 not located in the Central Procurement Offices. Examples are Engineering, Traffic Management, Comptroller, etc.

D. MEASURING EFFICIENCY WITH PAMUPS.

Time in the workplace is classified as available and nonavailable. Non-available time is defined as leave, holidays, etc. while available time is used in measuring the productivity of the workforce. Figure 5 breaks available time down to the productive and nonproductive levels, where productive time is categorized as that involved with direct and indirect labor. Productive efficiency is measured by taking the ratio of productive to available time.

PAMUPS calculates the efficiency of a Procurement Directorate by using such a ratio where productive time is denoted as earned hours. All those units within the directorate which are directly involved with the development of a procurement instrument will receive earned hours based on the standards established for direct effort. However, those units in the overhead area, i.e. not directly involved with the processing of a procurement instrument,

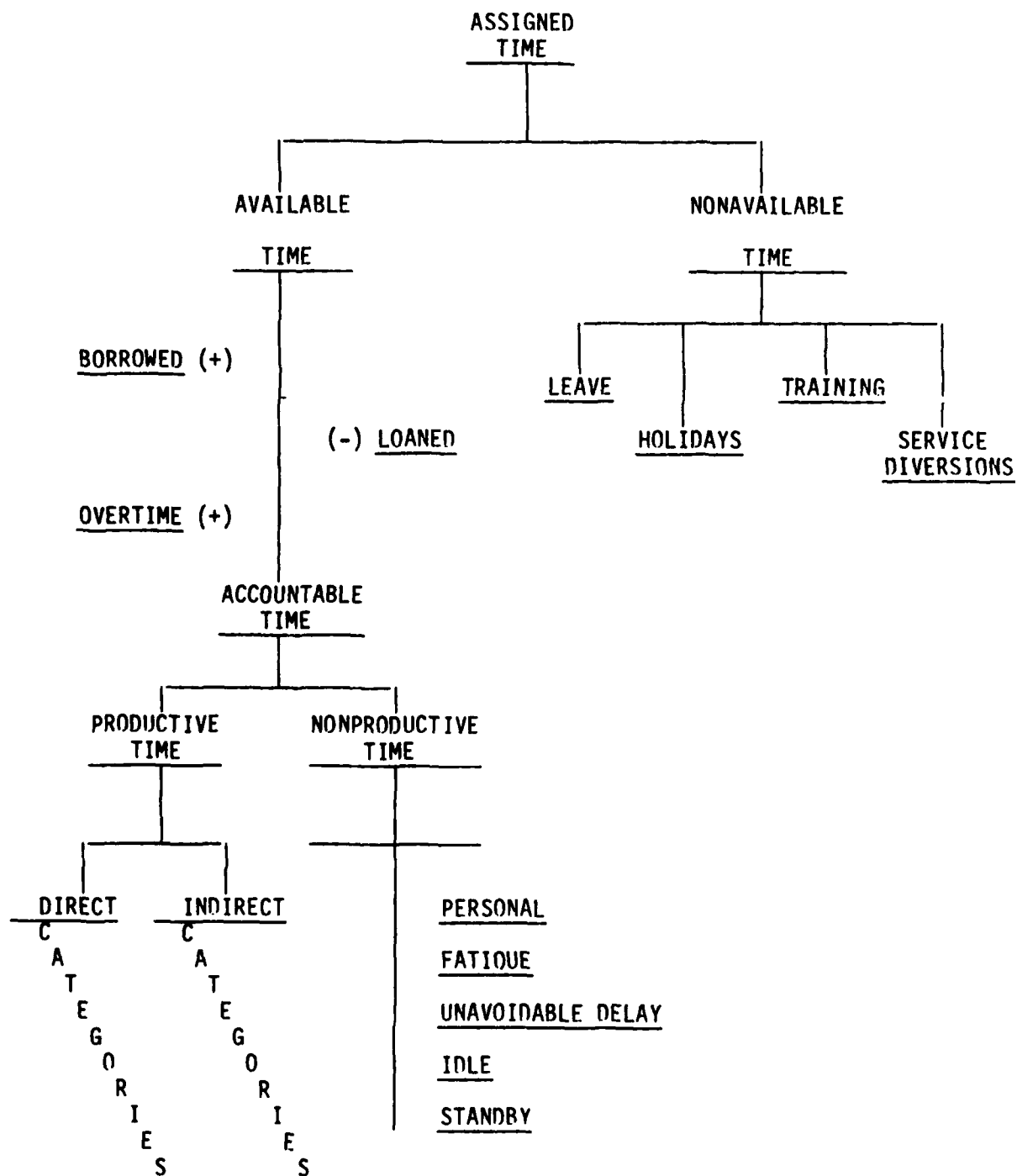


FIGURE 5. TIME CLASSIFICATIONS*

*Chart provided by DARMEA

will receive zero earned hours since they are not covered by standards and hence their work not accounted for in PAMUPS.

In order to achieve the true measure of the efficiency of a central procurement office a way must be found to count the hours earned by the central procurement staff performing purely indirect work and those workers who are involved with direct labor tasks on less than a full time basis. Figure 6 illustrates the problem.

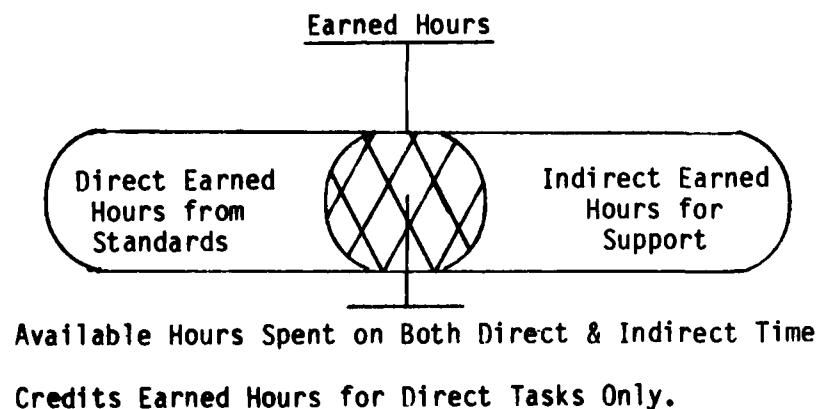


FIGURE 6. INTERSECTION OF DIRECT & INDIRECT EARNED HOURS

The workers in those units which do both direct and indirect labor will record earned hours under the PAMUPS direct labor standards, but not earn any hours for their time in the support area. If a significant portion of their work time is in the direct labor area then this will not impact badly on their efficiency. However, if the major portion of their worktime is in the indirect area then their efficiency will be recorded as significantly less than actual, since they accrue few earned hours from the direct labor standards and none from the indirect earned hours. If the percentage of time these workers deal with direct labor can be estimated, then a more accurate measure of their efficiency could be determined using the following:

$$\begin{aligned} & \text{Direct Labor Earned Hours} \times \text{Percentage} + \text{Pure Support Earned Hours} \\ & = \text{Total Earned Hours} \end{aligned}$$

However, the percentage of time doing direct labor may vary between activities within a MSC and also between MSC's, hence a unique percentage must be determined for each position encountering this problem.

To develop proper standards for the indirect effort and to determine the best percentages discussed above would require a thorough engineering effort. Since DARMEA is scheduled to perform an Army Performance Oriented Review and Standards (APORS) at each MSC to ensure the establishment of a valid work measurement system it was decided to let them develop the actual work measurement standards for the indirect functions within central procurement and hence eliminate a duplication of effort. However, until DARMEA can develop indirect work standards, there exists a need for an interim satisficing work measurement system where the direct work effort is covered by standards and the indirect work effort is at least accounted for in the efficiency measurement of PAMUPS. To avert a delay in the implementation of PAMUPS it was decided that this report provide a satisficing system which leads in the proper direction.

To allow support personnel to accrue earned hours and their available hours to be accounted for until standards are developed, a separate category has been introduced into PAMUPS named "support earned hours." Since no standards are available for indirect labor, support personnel will be evaluated on a one-for-one basis. That is, each available hour is essentially an earned hour. Equating indirect labor with 100% efficiency for the interim until standards are developed was considered to be more realistic than allowing no credit for the indirect contribution to mission accomplishment. The use of a percentage allocation of earned hours based on the ratio of indirect-direct

staffing in an organizational element was also investigated. The percentage method proved impractical since the percentage value for each element would have to be determined and a formula for their individual application included in the efficiency summary format. However, the major impracticality with the percentage method was the fact that changes in the percentage could only be made to the efficiency summary through the Commodity Command Standard System (CCSS) release system. In addition, the ratio varied significantly between commands. The evaluation of support personnel on a one-for-one basis was considered as the most direct way to readily manifest the measurement of the indirect work effort into the present system and to more easily modify in the future as required.

To address the intersection of direct and indirect earned hours described by Figure 6, a method does exist which may presently alleviate some of the problem until an optimal solution is found. The DARCOM Supplement to AR 37-100-XX, provides for the Army Management Structure Cost codes, 721113.18.2, to identify central procurement operations support spaces in the TDA program elements by placing 9 in the twelfth space of the .1 and .2 codes, respectively, that is 721113.100009 and 721113.200009. The number 9 in the designated space deals with providing for the overall management of the procurement function. Also, the number 3 can be placed in the twelfth space of the .1 and .2 codes, i.e., 721113.100003 and 721113.200003, to indicate the support provided by the overhead areas of the Small Business Program and the Legal Offices. If it is decided that workers in the crisscrossed area of figure 6 are primarily involved with support then the applicable numbers can be placed in their AMS codes and implemented in PAMUPS so their earned hours will be recorded as support. In fact these code numbers can be used to identify all support

spaces. This procedure of using AMS codes would improve the work measurement effort.

Figure 7A illustrates the old earned efficiency format. Column 8, listed as Total Earned Hours, only measured the direct labor effort. In order to include the work effort for the support functions a change was made in the format of the efficiency summary. Columns 3 and 4 were combined as were columns 5 and 6, and new columns titled "Mission Earned Hours" and "Support Earned Hours" were added (see note below Figure 7B). This change was made to provide a means to capture at least part of the support effort as shown in Figure 7B. Using the logic explained earlier, the indirect labor function is coded as through put for the data of Branch B in Figure 7B. Hence, the support earned hours (column 7) equals the available hours in column 5 allowing the work effort of support Branch B to be counted in PAMUPS. However, it must be recognized that this system will only work for organizational elements which are strictly divided into direct or indirect functions. The example of Branch C demonstrates the problem of not knowing the actual contribution of the indirect function and consequently having to ignore it in favor of the accrued mission earned hours. (See referenced SCR for full explanation of report format and logic).

1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DIVISION	NORMAL PAY-ROLL HOURS	OVER/COMP TIME HOURS	BORROWED HOURS	NONAVAIL-ABLE HOURS	LOAN HOURS	AVAILABLE HOURS	TOTAL EARN-ED HOURS	EFFICIENCY
Branch A	30,000.00	800.00	50.00	4,000.00	100.00	26,750.00	29,750.00	1.11
Branch B	20,000.00	0.00	0.00	3,000.00	0.00	17,000.00	0.00	0.00
Branch C	13,200.00	400.00	0.00	2,250.00	200.00	11,150.00	5,250.00	0.47
DIV. TOTAL	63,200.00	1,200.00	50.00	9,250.00	300.00	54,900.00	35,000.00	0.64

FIGURE 7A. OLD EARNED EFFICIENCY SUMMARY

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DIVISION	NORMAL PAY-ROLL HOURS	OVER/COMP TIME HOURS	NONAVAILABLE AND LOANED HOURS	AVAILABLE HOURS	MISSION EARNED HOURS	SUPPORT EARNED HOURS	TOTAL EARNED HOURS	EFFICIENCY
Branch A	30,000.00	850.00	4,100.00	26,750.00	29,750.00	0.00	29,750.00	1.11
Branch B	20,000.00	0.00	3,000.00	17,000.00	0.00	17,000.00	17,000.00	1.00
Branch C	13,200.00	400.00	2,450.00	11,150.00	5,250.00	0.00	5,250.00	0.47
DIV. TOTAL	63,200.00	1,250.00	9,550.00	54,900.00	35,000.00	17,000.00	52,000.00	0.95

LEGEND: Branch A - 100% of available hours expended on direct mission effort.
 Branch B - 100% of available hours expended on indirect functions.
 Branch C - Branch performs both direct and indirect functions.

REF: SCR NO. XBBS0C922900E

FIGURE 7B. NEW EARNED EFFICIENCY SUMMARY

NOTE: Column's (3) and (4), and (5) and (6) on the old summary were combined as columns (3) and (4) respectively in the new summary to provide spaces for new column's (6) and (7)

CHAPTER III

CONCLUSIONS AND RECOMMENDATIONS

A. GENERAL.

Although this study does not develop standards for the indirect work effort, it does identify the location of those central procurement units concerned with the overhead areas. In addition, the study has provided a means by which the indirect work effort can be measured and included in PAMUPS. When the conclusions and recommendations which follow are acted upon, PAMUPS will become a complete system.

B. CONCLUSIONS.

The organizational structure of the Procurement and Production Directorates varies by command. This variation in structure causes the actual element performing an indirect function to differ from command to command. The organization charts in this report identify the allocation of direct and indirect labor throughout the commands. These charts will assist DARMEA in their performance reviews of the MSC's.

Currently in PAMUPS, only those divisions covered by direct labor standards are recording earned labor hours. Proper assessment of the degree of efficiency with which central procurement personnel are being utilized will not be achieved until indirect labor tasks are recording earned hours. The DARCOM Supplement to AR 37-100-XX of the Army Management Structure Code provides a way to identify which manpower spaces deal with indirect work effort. Although PAMUPS presently has no work standards for the indirect work effort, PAMUPS is capable of categorizing its workload as direct or indirect and accounting for both. Until optimal work standards can be developed, indirect work hours can be accounted for by listing each indirect available hour as a support earned hour on a one-

for-one basis. This solution is readily manifested into the present system and can be modified with relative ease in the future as required. The one-for-one solution is preferred to a percentage allocation of earned hours based on the ratio of indirect to direct staffing. The percentage of indirect staffing ranged from 23.2% at TACOM to 38.0% at CECOM.

The allocation of central procurement spaces to organizational elements outside the Directorate for Procurement and Production or its equivalent was found at all commands. The number of support activities and personnel assigned vary significantly between commands. It is important that management monitor the allocation of resources to the 721113.1&.2 accounts to ensure proper measurement of Central Procurement's efficiency.

C. RECOMMENDATIONS.

1. The system change to PAMUPS to account for each indirect available hour as a support earned hour should be incorporated into PAMUPS. (This recommendation has already been acted upon by SCR NO. XRBSOC922900E).

2. HQ DARCOM (DPP) should maintain a PAMUPS coordinator to monitor the allocation of resources to the 721113.1&.2 account to ensure true measurement of Central Procurement's efficiency within PAMUPS.

3. DARMEA should use this report for identification of the location of central procurement indirect spaces within the MSC's.

4. DARMEA should work in cooperation with the Central Procurement Offices:

(a) To develop work standards for indirect functions within the central procurement offices with emphasis on those units with a mixture of direct and indirect work.

(b) To develop work standards for functional areas outside the central procurement office with assigned central procurement AMSC spaces.

5. DARCOM and the MSCs should continue to pursue an automated means within PAMUPS to classify the direct or indirect status of individual spaces. The use of the existing AMSC level of identification should be considered for this purpose.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) <p>> This study provides a means by which the indirect work effort of a Central Procurement Office can be measured and included in the Procurement Automated Management Utilization and Projection System (PAMUPS). Organizational charts contained within this report identify the allocation of direct and indirect labor functions at the P&P Directorates of the MSC's. The study is to be used by the DARCOM Management Engineering Activity (DARMEA) in cooperation (over)</p>		

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with the Central Procurement Offices at the MSC's to develop work standards for indirect functions.

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